

BUSINESS & INFORMATION TECHNOLOGY

Indiana State Approved Course Titles and Descriptions

Indiana Department of Education
College and Career Readiness
151 West Ohio Street
Indianapolis, IN 46204

BUSINESS & INFORMATION TECHNOLOGY

Course content standards and performance expectations and Indiana Academic Standards integrated at: <http://www.doe.in.gov/octe/bme/curriculum/contentstandardsvoc.htm>

Teacher Requirements - A vocationally licensed (CTE) business or marketing teacher must teach these courses: <http://www.doe.in.gov/educatorlicensing/pdf/AssignmentCode.pdf>

Introduction

Today's business world demands that students leave our schools prepared to meet the needs of employers and colleges. Many people—parents, students, legislators, and even other educators—believe that Career Technical Education: Business & Information Technology programs are only for students who expect to pursue a career in business. In reality, however, these programs provide a foundation for success for **all students**, regardless of their ultimate goals in life. Business competencies are required in all professions, not only technical skills but also an understanding of business operations and the social contexts of employment settings that determine how specific skills are applied.

Great strides have been made in the preparation of students for the workplace and post-secondary activities. Career Technical Education: Business & Information Technology programs have changed dramatically to meet the needs of business today. Training has evolved from primarily clerical/secretarial training to the development of many related skills. Business now expects that persons understand the basic concepts utilized in all positions/professions. Increasingly, more management personnel are responsible for many of the tasks once assumed by a receptionist or secretary, while decision making/problem solving is necessary at all levels. Career Technical Education: Business & Information Technology programs are intended to provide students with situations which will allow them to experience those skills needed to succeed in the career and/or educational endeavors they pursue. Graduates of these programs should be prepared to understand the demands of others, to analyze rapidly changing events, and to formulate responsive, rational, and proactive approaches to decision making.

The CTE: Business & Information Technology Programs have been planned to allow students to prepare for careers in business while providing instruction that matches their abilities, interests, and personal qualities. The sequence of learning experiences offered will provide the opportunity for students to achieve their highest level of occupational competency.

The mission of Career Technical Education: Business & Information Technology in Indiana is to work cooperatively with the business community to prepare all individuals to live and work as productive citizens in a changing global society by providing essential business experiences, education, and training that will allow the student to have a greater chance of success in any career.

Business Professionals of America (BPA)

BPA is conducted on regional, state, and national levels and tests competency in various areas of business/office occupations. The words "Business," "Professionals," and "America" define the focus of BPA. Business: the field for which we prepare our students; emphasizes that we educate our students to work efficiently, not only in an office setting, but also in a wide variety of business situations. Professionals: our students indicate they join BPA to take advantage of a wide variety of professional development opportunities. America: symbolizes pride in our country and its free enterprise business system. The Special Recognition Awards Program and the Torch Awards Program are open to

participation by all chapters and recognizes outstanding, actively involved members on the local, regional, state, and national levels.

BUSINESS COOPERATIVE EXPERIENCES
(RELATED INSTRUCTION/ON-THE-JOB TRAINING)
(BCE)

5260

Business Cooperative Experiences is a career and technical education business course that provides opportunities for students to gain skills and knowledge through on-the-job training and related classroom instruction. Time allocations are a minimum of fifteen hours per week of work-based learning and approximately five hours per week of school-based instruction. The classroom instruction may be a blend of both group and individual instruction planned and organized with activities focused on career objectives and on-the-job training. Instructional strategies may include in-baskets, minibaskets, LAPS, and workflow simulations. Students participating in these structured experiences will follow class, school, State, and Federal guidelines. Students will be paid in accordance with all State and Federal laws pertaining to employment. Credit will be granted for both the related instruction and on-the-job training.

- Recommended Grade Level: 12
- Required Prerequisites: Computer Applications and/or Business Technology Lab I or II or a minimum of 4 credits from other business courses
- Credits: Grades and credits for related instruction and on-the-job training experiences are reflected under one course title for a total of six credits for the year. If an articulation or dual-credit agreement is in effect, the student may receive credit from a post-secondary institution.
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

BUSINESS TECHNOLOGY LAB I
(BUS TECH I)

5244

Business Technology Lab I is a career and technical education business course. The business technology curriculum provides instruction using current technology with an emphasis on the integration and application of communication, employability, industry certification, math, and language arts skills. Educational experiences will be based upon the student's individual career and educational goals. Instructional strategies may include in-baskets, minibaskets, LAPS, workflow simulations, and field experiences (job shadowing, mentoring, and/or internships).

- Recommended Grade Level: 10-11
- Required Prerequisite: Computer Applications
- Recommended Prerequisite: Computer Applications, Advanced
- Credits: A two- to four-credit course over one school year
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

BUSINESS TECHNOLOGY LAB II
(BUS TECH II)

5240

Business Technology Lab II is a career and technical education business course. As a capstone program, this course prepares students for employment in business occupations and/or to continue study in a postsecondary institution. Educational experiences will be based upon the student's individual career and educational goals. Business Professionals of America is the co-curricular organization associated with this course. Instructional strategies will include in-baskets, minibaskets,

LAPS, workflow simulations, real world experiences, school-based enterprises, industry certification, and field experiences (job shadowing, mentoring, and/or internships).

- Recommended Grade Level: 11-12
- Required Prerequisite: Business Technology Lab I
- Credits: A two- to four-credit course over one school year
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

BUSINESS, MANAGEMENT, AND FINANCE

5268 (BUS MT FIN)

Business, Management, and Finance is a career and technical education business course that prepares students to plan, organize, direct, and control the functions and processes of a firm or organization and to perform business-related functions. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business administration, management, and finance. Individual experiences will be based upon the student's career and educational goals. Instructional strategies should include in-baskets, minibaskets, LAPS, field trips, guest speakers, Internet searches, simulations, internships, and cooperative ventures between school and community.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I, Accounting I, Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- May be offered over a two- or three-year period by subtitling the course as determined by the school
- Meets Indiana's Financial literacy requirement (IC 20-30-5-19)

FINANCE ACADEMY

5258 (FIN ACAD)

Finance Academy is a specialized sequence of business courses, which provide instruction in finance and business fundamentals as they relate to financial institutions, financial planning, business and personal financial services, investment and securities, risk management, and corporate finance. Students are provided opportunities to develop attitudes and apply skills and knowledge in the area of finance. Individual experiences will be based on the student's career and educational goals. Instructional strategies should include computer/technology applications, real and/or simulated occupational experiences, and projects.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Computer Applications and Algebra I
- May be offered over a two- or three-year period by subtitling the course as determined by the school
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course
- Meets Indiana's Financial literacy requirement (IC 20-30-5-19)

INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY HIGHER LEVEL, INTERNATIONAL BACCALAUREATE

5242 (ITGS H IB)

Information Technology in a Global Society Higher Level, International Baccalaureate examines the interaction between information, technology, and society. Students develop an understanding of the advantages and disadvantages of new technologies as methods of expanding knowledge of the world at local and global levels. They analyze and evaluate the ethical considerations arising from the widespread use of information technology and are encouraged to recognize that people can hold diverse opinions about the impact of technology. The course also promotes an understanding of the social significance of information technology for individuals, communities, and organizations.

- Recommended Grade Level: Grades 11-12
- Recommended Prerequisites: None
- Credits: 4 semester course, 1 credit per semester
- A Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diploma elective and directed elective course

INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY STANDARD LEVEL, INTERNATIONAL BACCALAUREATE
(ITGS S IB)

5246

Information Technology in a Global Society Standard Level, International Baccalaureate examines the interaction between information, technology, and society and develops an understanding of the advantages and disadvantages of new technologies as methods of expanding knowledge of the world at global and local levels. Students gain an understanding of the social significance of information technology and recognize that people can hold diverse opinions about the impact of information technology on individuals and societies. The course also enables students to analyze and evaluate ethical considerations arising from the widespread use of information technology on all levels.

- Recommended Grade Level: Grades 11-12
- Credits: 2 semester course, 1 credit per semester
- A Core 40, Core 40 with Academic Honors, Core 40 with Technical Honors and International Baccalaureate diploma elective and directed elective course

INFORMATION TECHNOLOGY: INFORMATION SUPPORT AND SERVICES
(IT INFO SS)

5230

Information Technology: Information Support and Services is a career and technical education business and information technology course that will prepare students for careers in business and industry dealing with support and services in information technology. Students will gain the necessary skills to implement computer systems and deploy software solutions, provide technical assistance, and manage information systems with attention to security. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” Skills needed to acquire related certifications will be an integral part of this program; e.g., Microsoft MOS, Novell CNA, CompTIA A+, Security+, etc. Essential skill and knowledge areas include but are not limited to: General Computer Usage Skills; Management Information Systems; Basic Network Systems; Basic Programming; Basic Interactive Multimedia Development; Business Skills; and Management Skills.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I and Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- May be offered over a two- or three-year period by subtitling the course Beginning, Intermediate, or Advanced
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course

INFORMATION TECHNOLOGY: INTERACTIVE MEDIA
(IT INTMED)

5232

Information Technology: Interactive Media is a career and technical education business and information technology course that will prepare students for careers in business and industry working with interactive media. Students will become competent in creating, designing, and producing secure interactive media products and services for business and industry. This program of study emphasizes the development of digitally-generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” Skills needed to acquire related certifications will be an integral part of this program; e.g., CIW (Certified Internet Webmaster) Foundations, Application Development, E-Commerce, Enterprise Development; Microsoft MCSD, Visual Basic, C/C++, Java, etc. Essential skill areas include but are not limited to: Animation; Media Design; Interactive Digital Media; GUI Interfaces; Instructional Application; Application Design; Authoring Languages; Audio/Visual Production; and Digital Imaging.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I and Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- May be offered over a two- or three-year period by subtitling the course Beginning, Intermediate, or Advanced
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course

INFORMATION TECHNOLOGY: NETWORK SYSTEMS
(IT NET SYST)

5234

Information Technology: Network Systems is a career and technical education business and information technology course that will prepare students for careers in business and industry working with network systems. Students will acquire skills needed to plan, design, install, maintain, and manage network solutions used in business and industry. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” Skills acquired will assist students in obtaining related networking systems certifications; e.g., A+, Cisco CCNA and CCNP, Security+, Network+, Novell CNA and CNE, Microsoft MCSE, etc. Essential skill areas include but are not limited to: Computer Hardware Maintenance; Network Operations; Network Administration; Basic Network Design Theory; Network Troubleshooting; Network Security; and Wireless Communications.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I and Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- May be offered over a two- or three-year period by subtitling the course Beginning, Intermediate, or Advanced
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course

**INFORMATION TECHNOLOGY:
PROGRAMMING AND SOFTWARE DEVELOPMENT**
(IT PROGSD)

5236

Information Technology: Programming and Software Development is a career and technical education business and information technology course that will prepare students for careers in business and industry as providers of software solutions. Students will learn to design, develop, test, document,

implement and maintain secure computer systems and software. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace”. Preparation for AP Programming A and AB as well as skills needed to acquire certifications will be an integral part of this program; e.g., Microsoft MCSD, Visual Basic, C/C++, Java, SQL, RDMS, etc. Essential skill areas include but are not limited to: Computer System Architecture; Information Systems Analysis; Principles of Programming & Software Design; Related Database Design; SQL/SQL Programming; and Client and Server Side Programming.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I, Algebra II, and Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- May be offered over a two- or three-year period by titling the course Beginning, Intermediate, or Advanced
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course

PREPARING FOR COLLEGE AND CAREERS

5394

(PRE CCS)

Preparing for College and Careers addresses the knowledge, skills, and behaviors all students need to be prepared for success in college, career, and life. The focus of the course is the impact of today's choices on tomorrow's possibilities. Topics to be addressed include twenty-first century life and career skills; higher order thinking, communication, leadership, and management processes; exploration of personal aptitudes, interests, values, and goals; examining multiple life roles and responsibilities as individuals and family members; planning and building employability skills; transferring school skills to life and work; and managing personal resources. This course includes reviewing the 16 national career clusters and Indiana's College and Career Pathways, in-depth investigation of one or more pathways, reviewing graduation plans, developing career plans, and developing personal and career portfolios. A project based approach, including computer and technology applications, cooperative ventures between school and community, simulations, and real life experiences, is recommended.

- Recommended Grade Level: Grade 9
- Recommended Prerequisites: None
- Credits: A one-credit course over one semester
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas

PROFESSIONAL CAREER INTERNSHIP

5256

(PCI)

Professional Career Internship is a College and Career Readiness course that is designed to provide opportunities for students to explore careers that require additional degrees or certifications following high school. The emphasis of the experience is on applying skills developed through instruction and on learning new career competencies at the internship site. The internship is tailored to the unique needs and interests of the student and is considered a high school capstone experience towards fulfillment of the student's meaningful future plan. Upon completion of the internship, students will review and revise their College and Career plans. A training agreement outlines the expectations of all parties: the intern, parent/guardian, site supervisor/mentor, internship supervisor, and the school. Students participating in these structured experiences will follow class, school, business/industry/ organization, State, and Federal guidelines. Internships may be paid or unpaid and must include a classroom component (such as a series of seminars, workshops, or class meetings) and regular contact between the interns and internship coordinator.

- Recommended Grade Level: 11-12

- Recommended Prerequisites: Computer Applications and 4 credits in the student's College and Career pathway.
- Credits: A one- or two-credit course over one semester
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course
- A minimum of 70 hours of workplace experience and a minimum of 15 hours of workshops, seminars, and/or classroom activities is required for one credit
- A minimum of 140 hours of workplace experience and a minimum of 30 hours of workshops, seminars, and/or classroom activities is required for two credits
- Internship placement must match College and Career Plan